

Table S1. Urine Biomarker Associations with Longitudinal Outcomes Based Upon the Absolute Value of Biomarker, Biomarker Indexed to Urine Creatinine, and Biomarker Adjusted for 1/Urine Creatinine*

Composite Cardiovascular Disease Outcome (n=307)

Biomarker	HR (95% CI)	HR (95% CI)	p-value	HR (95% CI)	p-value
	Absolute Biomarker Level	Biomarker/UCr	Absolute vs. Indexed HR	Biomarker Adjusted for 1/UCr	Absolute vs. Adjusted HR
β 2-Microglobulin	1.05 (1.01, 1.10)	1.06 (1.02, 1.11)	0.31	1.05 (1.01, 1.10)	0.81
α 1-Microglobulin	1.28 (1.16, 1.42)	1.43 (1.29, 1.60)	0.02	1.44 (1.29, 1.62)	<0.01
YKL-40	1.06 (1.00, 1.11)	1.09 (1.03, 1.15)	0.01	1.09 (1.03, 1.15)	0.01
IL-18	1.07 (0.98, 1.16)	1.21 (1.09, 1.34)	<0.01	1.21 (1.09, 1.34)	<0.01
UMOD	0.80 (0.72, 0.90)	0.86 (0.75, 0.98)	0.27	0.79 (0.68, 0.91)	0.69
MCP-1	1.03 (0.96, 1.11)	1.17 (1.05, 1.31)	<0.01	1.23 (1.10, 1.37)	<0.01
KIM-1	0.99 (0.93, 1.06)	1.05 (0.95, 1.15)	0.07	1.10 (0.99, 1.22)	0.02
NGAL	1.07 (0.99, 1.14)	1.11 (1.04, 1.19)	0.04	1.10 (1.02, 1.18)	0.02
Albumin	1.14 (1.08, 1.21)	1.18 (1.11, 1.24)	0.02	1.17 (1.10, 1.24)	<0.01

All-Cause Mortality (n=166)

Biomarker	HR (95% CI)	HR (95% CI)	p-value	HR (95% CI)	p-value
	Absolute Biomarker Level	Biomarker/UCr	Absolute vs. Indexed HR	Biomarker Adjusted for 1/UCr	Absolute vs. Adjusted HR
β 2-Microglobulin	0.98 (0.93, 1.04)	0.99 (0.94, 1.04)	0.80	0.99 (0.93, 1.04)	0.92
α 1-Microglobulin	1.25 (1.09, 1.44)	1.29 (1.11, 1.50)	0.71	1.33 (1.13, 1.56)	0.13
YKL-40	1.11 (1.04, 1.19)	1.13 (1.05, 1.21)	0.38	1.13 (1.05, 1.21)	0.28
IL-18	1.15 (1.03, 1.29)	1.27 (1.10, 1.46)	0.05	1.27 (1.10, 1.46)	0.05
UMOD	0.88 (0.76, 1.04)	0.87 (0.72, 1.04)	0.79	0.84 (0.69, 1.02)	0.38
MCP-1	1.09 (0.98, 1.21)	1.21 (1.04, 1.41)	0.02	1.23 (1.06, 1.43)	0.04
KIM-1	1.07 (0.98, 1.18)	1.17 (1.01, 1.34)	0.07	1.20 (1.03, 1.39)	0.10
NGAL	1.12 (1.02, 1.23)	1.13 (1.03, 1.24)	0.78	1.13 (1.03, 1.25)	0.43
Albumin	1.18 (1.09, 1.27)	1.18 (1.09, 1.27)	0.98	1.18 (1.10, 1.28)	0.25

Composite Kidney Outcome (n=34)

Biomarker	HR (95% CI)	HR (95% CI)	p-value	HR (95% CI)	p-value
	Absolute Biomarker Level	Biomarker/UCr	Absolute vs. Indexed HR	Biomarker Adjusted for 1/UCr	Absolute vs. Adjusted HR
β 2-Microglobulin	1.11 (0.98, 1.26)	1.11 (0.98, 1.25)	0.70	1.10 (0.96, 1.25)	0.36
α 1-Microglobulin	1.18 (0.87, 1.58)	1.44 (1.03, 1.20)	0.10	1.40 (0.99, 1.97)	0.07
YKL-40	1.11 (0.98, 1.26)	1.17 (1.02, 1.34)	0.05	1.17 (1.03, 1.34)	0.07
IL-18	1.21 (0.95, 1.55)	1.43 (1.09, 1.87)	0.03	1.40 (1.07, 1.84)	0.01
UMOD	0.78 (0.57, 1.08)	0.90 (0.61, 1.33)	0.45	0.82 (0.54, 1.24)	0.94
MCP-1	1.21 (0.94, 1.55)	1.68 (1.22, 2.32)	<0.01	1.72 (1.25, 2.36)	<0.01
KIM-1	1.14 (0.90, 1.43)	1.69 (1.17, 2.44)	0.01	1.84 (1.27, 2.66)	0.01
NGAL	1.19 (0.97, 1.46)	1.27 (1.04, 1.56)	0.19	1.25 (1.02, 1.54)	0.12
Albumin	1.37 (1.15, 1.63)	1.44 (1.20, 1.73)	0.07	1.44 (1.20, 1.73)	0.05

All biomarker hazard ratios are per two-fold higher.

*All models adjusted for age, sex, race, randomized treatment arm, baseline eGFR, smoking status, history of cardiovascular disease, baseline number of antihypertensive medications, systolic blood pressure, diastolic blood pressure, body mass index, high-density lipoprotein, and total cholesterol

CI – confidence interval; eGFR – estimated glomerular filtration rate; HR – hazard ratio; IL-18 - Interleukin-18; KIM-1 - kidney injury marker-1; MCP-1 - monocyte chemoattractant protein-1; NGAL - neutrophil gelatinase-associated lipocalin; UCr – urine creatinine; UMOD - uromodulin; YKL-40 - chitinase-3-like protein-1